

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

F A C T S H E E T (pursuant to NAC 445A.236)

Permittee Name: City of Wells
P. O. Box 366
Wells, Nevada 89835

Permit Number: #NEV20015

Description of Discharge

Location: Wells Wastewater Treatment and Irrigation Reuse Site
Section 31, 32, T. 38 N., R. 62 E.
Latitude: 41E 08"; Longitude: 115E 00"

Characteristics: The City of Wells wastewater treatment facility and irrigation (reuse) site is approximately two miles northwest of Wells, Elko County, Nevada; it is designed to treat domestic sewage in compliance with secondary treatment standards. The wastewater generated in Wells is collected and discharged into the plant headworks passing through a communitor, bar screen, Parschall Flume and sonic flow meter. Flows are directed via an inlet structure to a 2.4 acre aerated lined primary facultative pond for initial treatment. Effluent flows by gravity into a 2.4 acre lined secondary facultative pond for further treatment, before being discharged via an overflow weir structure and pipeline into two 32 million gallon reservoirs -#1 (pond #3) and -#2 (Pond #4) that provide winter storage for effluent which is utilized for irrigation reuse during warm weather months. Effluent is applied to two 43 acre fields by center pivot spray irrigation systems to irrigate alfalfa crops.

Flow: The facility is limited to influent 30-day Average flows of 0.320 MGD, and Daily Maximum flows of 0.580 MGD. The facility is designed to properly treat this volume of domestic sewage. Influent and irrigation reuse flows are monitored.

Monitoring Parameters: Outfall 001 is after discharge from the storage ponds prior to irrigation.

Effluent CBOD₅: 30 mg/l 30-day Ave; 45 mg/l daily max.
Effluent TSS: no limits 30-day Ave; 90 mg/l daily max.
Fecal Coliform: Outfall 001 400/100 ml single value April - October
Total Nitrogen: Outfall 001 monitor monthly (seasonal)

Total Nitrogen Applied: Not to exceed the amount required by the plant materials (alfalfa).

Total Nitrogen Required based upon the agricultural uptake rate calculated yearly, based on the NDEP approved Effluent Management Plan.

General: The Wells wastewater treatment facility serves the City of Wells, and consists of a gravity collection system, a headworks structure, two treatment ponds, and two 32 million gallon disposal/storage reservoir ponds for spray irrigation reuse during warm weather months. Monitoring wells (7) are sampled and analyzed for Chlorides, TDS, Total Nitrogen-N and static water level.

No negative environmental impacts are anticipated as the result of the issuance of this permit.

Receiving Water Characteristics: The receiving waters are the groundwaters of the State, and the groundwater is of good quality.

GROUNDWATER MONITORING WELLS: -#s 1,2,3,4,5,6,9

<u>Parameters:</u>	<u>30-day Ave.</u>	<u>Daily Max.</u>	<u>Frequency</u>
--------------------	--------------------	-------------------	------------------

Wells # 1,2,4,6 and the downgradient irrigation site well #9

Total Dissolved Solids (TDS):	Monitor & Report		Yearly
Chlorides:	Monitor & Report		Yearly
Total Nitrogen as N:	10 mg/L		Yearly
Static Water Level:*	Monitor & Report		Quarterly

Wells # 3,5

Total Dissolved Solids (TDS):	Monitor & Report		Quarterly
Chlorides:	Monitor & Report		Quarterly
Total Nitrogen as N:	10 mg/L		Quarterly
Static Water Level:	Monitor & Report		Quarterly

~~~~~**SOIL MONITORING**

|                                                                                                                 |            |
|-----------------------------------------------------------------------------------------------------------------|------------|
| TOTAL NITROGEN: Concentration (mg/kg) at the<br>6 foot depth shall not<br>increase over a three year<br>period. | Discrete** |
|-----------------------------------------------------------------------------------------------------------------|------------|

\*\* Collect and analyze three soil samples each October at 0', 3', and 6' depths at each of the two irrigation sites, if in use.

**Procedures for Public Comment:**

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Elko Daily Free Press** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of newspaper publication of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

#### **Proposed Determination**

The Division has made the tentative determination to reissue the proposed permit for a five year period.

#### **Proposed Effluent Limitations, Schedule of Compliance and Special Conditions**

See Permit for Limitations.

The O and M Manual shall be revised, and it shall include a section or Chapter to include an Effluent Management Plan. The document shall be submitted to the Division by December 30, 2008.

#### **Rationale for Permit Requirements**

Monitoring is required to assess the level of treatment being provided by the facultative pond system, and to determine when design capacity is being approached.

Groundwater monitoring is required to ensure that groundwater quality is not degraded. Monitoring of irrigation water is required to track the quantity of the reuse water being applied by spray irrigation.

Prepared by: Icyl C. Mulligan  
October 2008